



Munich Personal RePEc Archive

# **Factors influencing venture capitalists' project financing decisions in South Africa**

Bart Van Deventer and Chipso Mlambo

University of Stellenbosch Business School

31. August 2008

Online at <http://mpra.ub.uni-muenchen.de/24970/>

MPRA Paper No. 24970, posted 12. October 2010 19:28 UTC

# Factors influencing venture capitalists' project financing decisions in South Africa

B. van Deventer and C. Mlambo\*

University of Stellenbosch Business School,  
PO Box 610, Bellville 7535, Republic of South Africa  
chipo.mlambo@gsb.uct.ac.za

*Received August 2008*

This study explores and identifies the investment criteria used by South African venture capitalists in their venture screening and evaluation processes. Using a Likert scale type of questionnaire, South African venture capitalists (VCs) were asked to rate the investment criteria identified in similar studies abroad and to report any additional criteria of their own. By evaluating the mean ratings, it was found that South African VCs consider the entrepreneur's honesty and integrity; a good expected market acceptance; and a high internal rate of return (IRR), to be the three most important criteria. The South African VCs, just like their overseas counterparts, regard management considerations to be the most important criteria group in the evaluation of new investment projects. The results of this study are deemed useful to both venture capitalists in their decision-making process and to entrepreneurs in their venture capital applications to maximise their success rate.

\*To whom all correspondence should be addressed.

## Introduction

Venture capital is a major source of funding for the entrepreneurial community and usually focuses on early stage, more risk-orientated, pre-initial public-offering business endeavours. Typically, funds will be raised and invested in a number of different opportunities. Entrepreneurs usually start and run on a shoestring budget and will seek venture capital once they are in a position to expand their businesses. Venture capitalists seek these high-risk and high-return opportunities where there is usually an exchange of equity for cash.

When venture capitalists decide to invest in a project, they make use of both quantitative and fundamental/qualitative methods. Quantitative valuation methods can, in some cases, provide them with a realistic value and indication of productivity. However, the lack of revenue and financial performance data, that usually accompanies a new venture, can render these methods less effective. Qualitative indicators are mostly from the school of strategy and are used for gauging strengths and weaknesses.

The importance of investment decision criteria becomes obvious with the fact that most venture capital firms are operated by a lean staff and that they are inundated with proposals that become a significant bottleneck in their operations (Larsson & Roosvall 2000:21). This will have an effect on productivity since much of their time will be spent evaluating and rejecting flawed proposals (MacMillan, Siegel and Subba Narasimha, 1985).

From the literature, it is evident that the criterion that carries the most weight in the venture capital decision-making process is related to the entrepreneur, his personality, integrity and experience. As stated by MacMillan *et al.* (1985:119) "There is no question that irrespective of the horse (product), horse race (market), or odds (financial criteria), it is the jockey (entrepreneur) that fundamentally determines whether the venture capitalist will place a bet at all." MacMillan, Zemmann and Subba Narasimha (1987) also found the extent of competitive barriers and market acceptance to be of significance.

The study proceeds as follows. Section 2 summarises the key literature in venture capital decision-making. Section 3 describes the data collection process and presents the research design and methodology. Section 4 analyses the data and reports the results. Section 5 summarises and concludes the paper.

## Review of related literature

According to Gompers & Lerner (2000:4-5), the role of a venture capitalist is nothing new in that entrepreneurs have long had ideas that required more capital to implement than funds were available to them. While there have been some use of bank loans or other sources of debt financing, in the situation where negative earnings and/or no track records exist, the uses of these facilities are limited and other sources of financing need to be secured. Venture capital represents one solution to the financing of these high-risk and potentially high-reward projects.

One of the problems for both venture capitalists and entrepreneurs lies in determining the economic value of an enterprise. This represents one of the more challenging discussions an entrepreneur can have with his investors (Quindlen, 2000). The situation is exacerbated by the fact that there is little guidance on the subject available in academic literature. Wright and Robbie (1998:558) conclude that "little work is available on valuation of venture capital investments".

Clearly, there is some difficulty in the valuation of new ventures. As Ge, Mahoney and Mahoney (2005:5) state, "idiosyncratic characteristics of new ventures (e.g., their short operating history and limited accounting information) and the inefficiency of the venture capital market present fundamental theoretical and economic measurement challenges for extant financial valuation approaches, which rely heavily on accounting information that early stage new ventures typically cannot provide." Thus the investigation and identification of nonfinancial methods and factors that can be used in decision-making may prove useful.

While venture capitalists have been in existence for a long time, with some tracing their roots back to Thalés de Millet and later to Vasco de Gama and Christopher Columbus, the formal venture capital industry is relatively young. The first formal venture capital firm, American Research and Development (ARD), was formed to try and commercialise the technologies developed for the Second World War. These include innovations particularly undertaken at the Massachusetts Institute of Technology. Success in ARD's different investments varied widely, with almost half of the company's profits in the 26 years of existence as an independent entity coming from its \$70 000 investment in Digital Equipment Company in 1957 (Gompers & Lerner, 2000). Since then, the Venture Capital industry has grown into a multi-billion dollar industry, spanning the globe and driving innovations.

The reason why venture capital exists is because of the way that the capital markets are structured. An entrepreneur with a new idea or product often has no other institution to turn to. Venture capital fills the void between sources of funds for innovation (mainly corporations, government bodies and the entrepreneur's family and friends) and traditional sources such as banks that supply debt to ongoing concerns. For the venture capital industry to work, it needs to supply investors of funds with a return on capital that is high enough to satisfy their appetite for the inherently higher risk that is associated with these new ventures. At the same time, it needs to offer entrepreneurs sufficient upside potential to share and attract high quality ideas with the potential for high returns (Zider 1998:133).

According to Zider (1998:135), there are four major participants in the venture capital industry, namely, the entrepreneur who needs the funding, the investor who wants the high return, the investment bankers who need companies to sell and the venture capitalists who want to make money. This is made possible by the creation of a market for the players mentioned.

Tyebjee and Bruno (1984:1052) suggested a model for a venture capitalist's investment activity containing five steps. The first step is deal origination, where the venture capitalist becomes aware of potential investment activities. This is followed by the screening process, where the number of potential investments is limited to a manageable amount. The third step is the evaluation process, where the viability of each screened project is determined and, lastly, the deal is structured through a process of negotiation. Once the deal is structured there are some post investment activities, such as supporting the new venture's management and control structures to protect the VC's investment.

Fried and Hisrich (1994:31) created a six staged model similar to Tyebjee and Bruno (1984:1052). The only difference is that this model includes two screening and two evaluation phases. One screening phase is venture capital firm-specific, where guidelines for investment eliminate candidates that clearly do not meet the criteria and exclude certain industries and geographic locations. The other phase is a general screening process. The first evaluation phase is used to determine the validity of the investment and the second phase is used to determine any obstacles to the investment and how they can be overcome.

### Venture capital decision-making

There have been several studies done trying to identify the different stages and criteria of the decision-making process. Studies on the processes and criteria used by venture capitalists have been done by Tyebjee and Bruno (1984), MacMillan *et al.* (1985; 1987), Fried and Hisrich (1994), Shepherd (1999), Kaplan and Strömberg (2003), Kakati (2003), Ge *et al.* (2005) and Pintado, De Lema and Van Auken (2007). According to Larsson and Roosvall (2000:4), the process is generally conducted in such a way that new ventures must first pass an initial screening, which is typically a review of the business plan. "This is then followed by meetings, a due diligence phase and negotiations around the more detailed issues regarding the investment."

In order to provide capital and to enable the success and optimisation of invested funds, venture capital firms use their decision-making processes to gather the information needed in order to make a decision on whether to reject or accept venture capital proposals (Larsson & Roosvall, 2000:3). The decision to invest is a difficult one with serious adverse selection risk. According to Fried and Hisrich (1994:1), the main purpose of the investment decision-making process used by venture capitalists is to reduce the risk of adverse project selection. The purpose is to assess the possibility of success or failure of a specific venture based on available information.

Venture capitalists' financing decisions are fraught with difficulties because entrepreneurs possess information about their opportunities and themselves that potential financiers find difficult or impossible to obtain (Amit, Glosten & Muller, 1990; Barry, 1994; Chan, Siegel & Thacker, 1990; Gompers, 1995). Because these significant information asymmetries exist between entrepreneurs and venture

capitalists, it could allow entrepreneurs to engage in opportunistic behaviour after an investment is made (Sahlman, 1988).

“Thus, financiers face high risks when selecting among entrepreneurs because entrepreneurs may act opportunistically towards them, and because entrepreneurs vary in their ability to identify and exploit opportunities”(Shane & Cable, 2002:364). This makes it extremely important to the venture capitalist to make the correct decision to invest in a specific project in order to avoid risk and optimise returns.

By understanding the nature and process of VC investment decisions, the entrepreneur can gain from the improved likelihood of his new venture being funded and in negotiating more agreeable terms. The stage of development, riskiness of the venture, background of the owner, geographic location and exit opportunity are some of the considerations in the venture capitalists' assessment of the risk and return potential of a venture (Van Auken, 2001). Identifying and understanding these issues and criteria will enable companies to develop better proposals and negotiate more effectively with venture capitalists (Timmons & Spinelli, 2004).

### Investment decision criteria

In the investment decision process and criteria, the techniques used to gather information include questionnaires, interviews and experiments. The literature can distinguish between “in use” and “espoused” criteria. “In use” criteria are used in the venture capitalists' actual decision-making process and “espoused” criteria are those criteria that venture capitalists report that they use when evaluating a new venture project. There is more tendency towards “in use” criteria in the later research, whereas earlier research tended towards “espoused” criteria that were gathered by making use of questionnaires. Shepherd (1999) investigated criteria related to the school of strategy and identified the following considerations in the investment decisions: Market considerations, Competition considerations and Management capability. He found the identified “in use” criteria to be consistent with those proposed in the strategy literature.

MacMillan *et al.* (1985) found that five of the top ten criteria had to do with the entrepreneur's personality and experience indicating that the quality of the entrepreneur tend to be the deciding factor in the funding decision. MacMillan *et al.* (1987) investigated criteria distinguishing successful from unsuccessful ventures in the venture screening process by rating 25 criteria. The criteria were divided into four general categories, Entrepreneur Characteristics, Product Characteristics, Market Characteristics and Financial Characteristics. It was found that two major factors are predictors of a venture's success, that is, the extent of insulation between the competition and the venture in the initial stage and the degree to which there is a demonstrated market acceptance of the product.

Kakati (2003) investigated 38 criteria in six categories, that is, the four categories identified by MacMillan *et al.* (1987)

and two additional categories, namely, Resource Based Capability and Competitive Strategy. It was found that a host of factors together influence the success or failure of new ventures. Thus using limited criteria may overlook important aspects of a venture. Kakati (2003:450) states that the “financial consideration itself is not an important determinant of a venture's success but if the right entrepreneur, the right strategy and the right product are chosen, and the right capability is developed, returns will follow.” Kakati (2003) suggests a model that is extended to incorporate criteria related to entrepreneurs, resource-based capabilities, strategies, industry/market structure, fit between resource availability and strategies, fit between market structure and strategies, and an interaction of those factors.

Whereas MacMillan *et al.* (1985) evaluated the importance of various potential criteria to individual VCs, Fried and Hisrich (1994) identified generic criteria that all VCs use. Fried and Hisrich (1994) found three basic constructs, that is, Concept, Management and Returns, containing 15 criteria. The Concept construct has four components. Firstly, there must be a significant potential for earnings growth. Secondly, the investment must involve a product or concept that already works or can be brought to the market within three years. Thirdly, there need to be a significant competitive advantage, or the industry should be relatively non-competitive. Lastly, the concept must have reasonable overall capital requirements.

As far as the Management construct is concerned, there are several criteria that VCs rate in the entrepreneur and management. Personal integrity is rated first, followed by prior experience and track record. Managers must be realistic and able to identify risk and deal with it where appropriate. Managers need to be hardworking, flexible and should have a thorough understanding of business. Flexibility and leadership are important criteria and managers must have general management experience. The Returns construct, on the other hand, has three components. Firstly, there need to be an exit opportunity. Secondly, the investment must offer the potential for a high rate of return and, finally, the venture must offer the potential for a high absolute return.

The Tyebjee and Bruno (1984) study is one of the most cited articles in the literature on venture capital criteria. Tyebjee and Bruno identified 23 criteria in 5 categories. The first, Market attractiveness, depends on existence, size, growth and accessibility of the market. The second, Product differentiation, is determined by the ability of the entrepreneur to apply technical skills in creating a unique product that can be protected by patents and enjoy a high profit margin. The third, Managerial capability, results from the skills of the founding team in managing several business functional areas. The fourth, Environmental threat resistance, represents the extent to which the venture is able to resist and deter threats from the external environment, which is influenced by factors like barriers to entry and changes in technology. The last category is called the Cash-out potential, and represents the extent to which the venture capitalist feels that the investment can be harvested in the appropriate time frame.

Pintado *et al.* (2007) did research on the Spanish venture capital market and had the following findings. All characteristics about the owner were found to be of high importance and were rated in the following order. Honesty and Integrity were rated as the most important, followed by Knowledge of the sector, Work experience, Management team, Leadership skills, and finally, Understanding of company objectives. There was a small standard deviation in the respondents' ratings giving an indication of high agreement between them.

Three of the product characteristics, that is, proven product success, product stage of life cycle and marketing strategy were ranked as important. Similarly, they had a small standard deviation indicating agreement between respondents. Market related issues rated higher than the requirement that the product be high tech, indicating that market issues relating to the product are more important than whether the product is orientated toward high technology. However, market related issues are generally ranked as being less important than owner and product characteristics.

### The South African venture capital industry

Although there has been a significant expansion in private equity activity in South Africa in recent years, the focus has not been on venture capital but rather on mergers and acquisitions activities by larger players. This is evident in the spate of buyouts that happened in the last two years. There is increased interest in South African companies by international players as these companies display strong earnings growth, improved exit values, and high dividend ratios, when compared to venture projects elsewhere in the world. According to Bloomberg online, of the 21 South African companies screened by Merrill Lynch almost half of them had an internal rate of return of more than 15%, compared to less than a third of companies in Europe (SouthAfrica.info, 2007). South African companies also have net debt-to-equity ratios of about 7% compared to 32% in the USA and 45% in Europe. This gives buyout investors the opportunity to gear their investments (SouthAfrica.info, 2007).

Black Economic Empowerment (BEE) remains a major source of activity in the industry and there are major moves by industry players not only to transform themselves but also to promote BEE investments into companies (SAVCA, 2007). According to Cohen (2006) of Argil Venture Capital, the South African venture capital industry remains in its infancy. It is unlikely that new VC funds will be established to focus on early stage opportunities until there are a reasonable number of meaningful VC success stories. However, without the VC Funds, it is unlikely that these success stories will occur – a somewhat catch-22 situation.

Long (2007) stated that the American model for venture capital does not work in South Africa. This is because there is a bigger demand for capital with greater risk and less returns. There is also an increasing demand for early stage investments and if these are not going to be funded, a situation may develop where there might not be enough later stage investments available in the future. It is clear from the

media reports and from entrepreneurs and VCs alike, that sourcing funds for start-up firms in South Africa is problematic in that there are not enough funds to go around. This will manifest in difficulties for both the entrepreneur, in that he/she struggles to locate investment capital, and the VC, in that there will be an ever increasing pile of applications to sift through and locate suitable firms to invest in.

The objective of this study is to identify the criteria that must be fulfilled in order for a new venture to succeed in obtaining venture capital funding in the South African market. This is done by identifying factors and characteristics in the literature that venture capitalists look at and asking the sampled venture capitalists to rate them in order of importance. The results of this study are then compared with those of similar studies done in the USA and Europe, where most of the studies regarding venture capital investment criteria were done in the past. This study will help both prospective venture capitalists in their decision-making process and entrepreneurs in the preparation of their venture capital applications.

### Data and methodology

A survey was conducted based on a sample drawn from a list of full and associate members of the South African Venture Capital Association (SAVCA). Even though SAVCA has 55 full members and 27 associate members, some of the members do not fall within the traditional definition of venture capitalists. This is because, although they supply services to the venture capital industry, they do not participate in actual venture capital activities. Most of the exclusions were associate members who consist mostly of law and advisory or consulting firms.

Many full members of SAVCA also do not qualify as traditional venture capitalists. This include members who are involved in hedge fund and private equity activities and as such do not meet the criteria of venture capitalists. Investment holding companies were also excluded as they tend to do strategic longer term investments. The remainder of the companies that were excluded consists of banking and financing companies and companies involved in entrepreneurship via community upliftment. After an extensive elimination process, only 16 SAVCA members qualified as venture capital firms and were used in the survey. From the 16 questionnaires sent out, 12 completed surveys were returned giving a response rate of 75%.

Participants had the option to fill in and submit an online questionnaire, fill in the word document and send it via email, or print out the questionnaire and fax the completed document. To ensure privacy and security, a secure website that could only be accessed with a valid username and password was established. All participants in the survey were contacted via email and supplied with an electronic copy of the questionnaire in Microsoft Word format, a URL to the online survey and a valid and individual username and password. The website was created with Visual Studio 2005 in the C# language on a Microsoft Internet Information Server. Microsoft SQL Server 2005 was used as the back-end database to collect the data. The website was browser

independent so as to facilitate the answering of the survey in the browser of choice of the respondent.

### Questionnaire

The questionnaire was used as the sole method of data collection. To start off, respondents were asked to rank four categories of criteria in order of importance from 1 to 4. The four identified categories were “Management criteria”, “Product criteria”, “Financial criteria” and “Market criteria”. The rest of the survey contained Likert scale questions in the above-mentioned categories and an additional category called “Other criteria”. This category contained criteria that were not listed under any of the four aforementioned categories.

The Likert scale questions were formulated from criteria identified in the literature and used by overseas VCs in their evaluation processes. Respondents had to rate the criteria in order of importance with 1 being “not important at all” through to 5 being “very important”. This served to provide information on the relative importance of the factors. A Likert scale questionnaire provides a consistent means of obtaining data. It helps reduce bias that may be introduced by making use of interviews with open-ended questions and it permits a more detailed statistical analysis of responses than is possible with semi-structured or open-ended questions.

### Limitations

The study was limited to South African venture capitalists that support small and medium scale enterprises in their early stage of development with a minimum investment amount of less than R 15 million. Because the gathering of data is retrospective, VCs may overstate successful and understate unsuccessful aspects of the venture and there might be biases and errors associated with self-reporting. The order effect was limited by randomising the questions within the defined categories and not presenting them in any perceived order of importance. Due to the strict definition of venture capitalists used in this study, the population of possible respondents was rather small. It was feared that relaxing the definition to increase the population size might have introduced bias and skew the results.

### Analysis of investment decision criteria

The rankings for the four categories of criteria, that is, “Management considerations”, “Product considerations”, “Financial considerations” and “Market considerations”, were analysed using a nonparametric test, the Friedman two-way analysis of variance (ANOVA) by ranks. The objective was to determine if there are significant differences, at the 10% level of significance, in the perceived importance of the four categories. The observed Friedman statistic of 7,3 was larger than the chi-squared critical statistic of 6,2514 suggesting that there are significant differences in the rankings of the four categories. This is confirmed by the p-value of 0,0629. It can, therefore, be concluded that differences exist in the perceived importance of at least 2 categories when the test is conducted at the 10% level of

significance. The Friedman test results are presented in Table 1.

**Table 1: The Friedman test results**

<b>Friedman Test</b>			
<b>Group</b>	<b>Rank Sum</b>	<b>Mean</b>	<b>Std. Dev.</b>
<i>Management Considerations</i>	40	3,3333	0,8876
<i>Product Considerations</i>	27	2,2500	1,0553
<i>Financial Considerations</i>	29	2,4167	1,1645
<i>Market Consideration</i>	24	2,0000	1,0445
Fr Stat	7,3		
df	3		
p-value	0,0629		
chi-squared Critical	6,2514		
Coefficient of concordance	0,2028		

By looking at the means of the different categories in Table 1, it can be seen that the mean of management considerations is 3,3333 and that this is remarkably higher than the mean of market criteria at 2,0000.<sup>1</sup> Therefore, the results suggest that management considerations are considered to be the most important criteria group and market considerations to be the least important. Management considerations were ranked as most important by 58% of the VCs participating in this study, whilst 17% of the participants ranked them as second most important. It can, therefore, be concluded that 75% of the participating VCs consider management considerations to be either the first or second most important criteria group in their investment decisions.

To investigate if management considerations are significantly more important than market considerations, the Sign test was used. The null hypothesis that no difference exists between the two categories was tested against the alternative hypothesis that management considerations are more important than market considerations. The test was done at the 10% level of significance.

The z statistic of 2,3094 is larger than the z critical value (one-tail) of 1,2816 suggesting that the null hypothesis can be rejected at the 10% level of significance. The p-value of 0,0105 is also very small suggesting that there is strong evidence in favour of the alternative hypothesis. It can, therefore, be concluded that South African venture capitalists perceive management considerations to be more important than market considerations. This is consistent with the findings of MacMillan *et al.* (1985) who found that

<sup>1</sup>The data used in this analysis was manipulated by reversing the original rankings in order to associate a higher mean with the more important criteria and a lower mean with the least important criteria.

the quality of the entrepreneur tends to be the deciding factor in the funding decision. Wells (1974), Poindexter (1976) and Tyebjee and Bruno (1984) found management commitment, quality, and skills and history, respectively, to be the most important criteria.

**Table 2: Sign test results**

Sign Test	
Difference	<i>Management considerations – Market considerations</i>
Positive Differences	10
Negative Differences	2
Zero Differences	0
z Stat	2,3094
P(Z<=z) one-tail	0,0105
z Critical one-tail	1,2816
P(Z<=z) two-tail	0,0210
z Critical two-tail	1,6449

### The most important criteria

Data obtained from the rest of the questionnaire through the Likert scale questions, were summarised using means and standard deviations. Thirty nine percent of the criteria gave a mean rating higher than 4 and they consist of 10 management criteria, 2 product criteria, 5 financial criteria and 4 market criteria. These were thus considered to be the most important criteria and are presented in Table 3.

The findings support those of Wells (1974), Poindexter (1976), Tyebjee and Bruno (1984) and MacMillan *et al.* (1985; 1987) who found management criteria to be the most important. MacMillan *et al.* (1985) stated that five of the top ten criteria had to do with the entrepreneur's personality and experience indicating that the quality of the entrepreneur tend to be the deciding factor in the funding decision. Mishra (2004) found that Indian VCs, like their South African counterparts, rated the entrepreneurs' personality traits and experience much higher than the financial criteria, which in turn were regarded as more important than both the product and market criteria.

The first three criteria, that is, the entrepreneur 's honesty and integrity, a good market acceptance for the product or service, and a high internal rate of return (IRR), were tied with a mean rating of 4,9 and a standard deviation of 0,3. The market need for the product or service was rated slightly lower with a mean rating of 4,8 and a standard deviation of 0,4. This criterion is closely related to good

market acceptance for the product or service. Therefore, it is clear that market need and acceptance of product or service are undoubtedly important criteria. The four criteria were from each of the four categories. This seems to support the view by Kakati (2003) that if you get the right entrepreneur, the right strategy, the right product and capability, the return will follow.

The rating of the entrepreneur's honesty and integrity as most important by South African VCs is in agreement with what Pintado *et al.* (2007) found in his research on the Spanish venture capital market. He found all characteristics about the owner to be of high importance, with honesty and integrity being the most important, followed by sector knowledge, work experience, management team, leadership skills and, finally, understanding of company objectives. As is the case in this study, a small standard deviation was found in Pintado *et al.* (2007) indicating a high level of agreement between the respondents.

The results are also supported by the findings from Fried and Hisrich (1994). Besides the viability and novelty of the project, and the possibility of high returns on investment, the integrity, track record and leadership skills of the entrepreneur were also found to be very important. According to MacMillan *et al.* (1985), the criterion that carries the most weight in VCs' decision-making process is related to the entrepreneur, his personality, integrity and experience. Mishra (2004) found that in about 97% of the cases in both the USA and India, the entrepreneurs' former business associates are contacted for due diligence to investigate the entrepreneur's integrity, attention to detail and urge to grow.

Also tied in first place is a good market acceptance for the product or service. The importance of this criterion is confirmed by MacMillan *et al.* (1987) who found market acceptance of the product and insulation against competitive attacks to be the most important criteria and an indication for success. Mishra (2004) found that, as a rule, VCs will not invest in a business without a clear indication of market acceptance for the product no matter how technically advanced the product may be.

The third criterion also tied in first place is the IRR. The IRR is defined by Wright and Robbie (1998) as a process that is likely to be made up of a series of iterations using differing possible future trends in the performance of the venture and that this is the most common performance measure in the industry. The rating of this criterion as jointly most important by South African VCs concurs with Wright and Robbie (1998) but seems to be in disagreement with Dixon (1991) who states that there is little scrutiny of information to adjust target IRRs.

**Table 3: Criteria rated as important by participating VCs**

Criterion	Mean	Std. Dev.	Category
The entrepreneur is honest and has integrity	4,9091	0,3015	Management
A good market acceptance for the product or service is expected	4,9091	0,3015	Product
The venture will provide a high internal rate of return (IRR)	4,9091	0,3015	Financial
There is a market need for the product or service	4,8182	0,4045	Market
The entrepreneur has a great desire for success	4,7273	0,4671	Management
The product/service has a competitive advantage over competing products	4,7273	0,4671	Product
The venture has high valuation projections	4,7273	0,4671	Financial
There is potential for market growth	4,7273	0,4671	Market
The venture has significant potential for earnings growth	4,6364	0,5045	Financial
The entrepreneur has excellent management skills/experience	4,5455	0,5222	Management
The entrepreneur is hardworking and flexible	4,5455	0,5222	Management
The entrepreneur has good leadership ability	4,4545	0,5222	Management
The market is big	4,4545	0,6876	Market
The entrepreneur has good risk management qualities	4,3636	0,6742	Management
The venture has high profit margin projections	4,2727	0,7862	Financial
The entrepreneur has a good track record	4,2727	0,6467	Management
The entrepreneur has good knowledge of the sector	4,1818	1,4709	Management
The entrepreneur is capable of intense, sustained effort	4,1818	0,6030	Management
The venture will provide a high absolute return	4,1818	0,6030	Financial
The product/service has open access to the market	4,1818	0,7508	Market
The references of the entrepreneur are reputable	4,0909	0,9439	Management

### The least important criteria

Table 4 list the criteria that were rated as not important by the VCs and consist of all criteria that had a mean rating of less than 3. There were ten criteria overall, consisting of 5 financial criteria, 2 product criteria, 2 market criteria and 1 uncategorised criterion. None of the management criteria were considered to be unimportant, confirming the results reported so far in this study. This is, however, contrary to some earlier overseas studies that discounted the role of the entrepreneur in favour of other variables such as resource-based capabilities, strategy and industry structures as determinants of the success of a new venture (Sandberg & Hofer, 1987).

The least important of the criteria is the tax benefit with the lowest mean rating of only 1,9. The level of agreement among respondents was high, as evidenced by a low standard deviation of 0,7. This is consistent with Tyebjee and Bruno's (1984) findings that tax benefits were not

valued in 34% of the cases although the percentage is much higher in the current study at 53,3%. The explanation by Tyebjee and Bruno that most VCs see their mission as reaping capital gains, rather than providing a tax shelter to their investors, seems plausible.

Pries (2001) states that follow up financing is by far the most common event. South African VCs consider the criterion that no follow up investment is required to be the second least important and is tied in this place with the criterion that the venture will require low monitoring and administration costs. This could imply that the VCs do not mind incurring high monitoring and administration costs since monitoring is an inherent part of their activities. According to Wright and Robbie (1998), monitoring is a costly exercise that cannot be performed continuously but that it is very important that the VC periodically check the status and preserve the option to terminate the investment at each stage.



**Table 4: Criteria rated as not important by participating VCs**

Criterion	Mean	Std. Dev.	Category
There will be a tax benefit in financing the venture	1,9091	0,7006	Financial
There will be no follow up investment required	2,0909	1,3004	Financial
The venture will require low monitoring and administration costs	2,0909	1,3004	Financial
The venture has BEE status	2,3636	1,2863	Other
The venture will operate in a non-competitive industry	2,4545	1,0357	Market
The venture will require low marketing and production costs	2,6364	1,1201	Financial
The venture will create a new market	2,6364	0,9244	Market
Product/service is in an early stage of life cycle	2,7273	1,7373	Product
The venture has low overall capital requirements	2,7273	1,1037	Financial
The venture has production capabilities in place	2,8182	1,3280	Product

The BEE status of the venture as a criterion is uniquely South African and could not be compared with any overseas studies. SAVCA (2007) found BEE to be an emerging and important driving force in the recent growth of the private equity industry. The low rating of this criterion seems to suggest that the importance of BEE is isolated to the bigger private equity deals and has no influence in the South African VCs' decision-making processes.

### Conclusion and recommendations

This study explores and identifies the investment criteria used by South African venture capitalists in their venture screening and evaluation processes and compares these criteria with the results obtained in similar studies abroad. By identifying the criteria that are deemed as important, venture capitalists can enhance their decision-making processes and entrepreneurs can adjust their preparations for venture capital applications to maximise their success rates. By alerting entrepreneurs of these criteria, some potentially flawed proposals can be corrected beforehand, hence enhancing the venture capital process for both the venture capitalist and the entrepreneur.

The data were collected by sending a questionnaire to 16 identified South African venture capitalists, of which 12 responded. Criteria used by venture capitalists in Europe and the USA were identified from the literature and used to construct the questions for the questionnaire. South African VCs were asked to rate the importance of these criteria on a scale of 1 to 5, with 5 being "very important". The data were summarised by computing means and standard deviations of the responses. It was found that the three most important criteria for South African VCs are the entrepreneur's honesty and integrity, a good expected market acceptance and a high IRR. Using the Friedman and Sign tests, it was found that South African venture capitalists, just like their overseas counterparts, value management related factors in evaluating new projects for investment, than they do market related factors. The results are deemed useful to VCs in their assessments of venture projects and possibly to entrepreneurs in their quest for capital.

Because of the limited pool of venture capitalists in South Africa, future studies of this nature should consider a cross country or regional analysis. This would increase the population from which to sample, thereby improving the reliability of the statistical results. A further possibility to increase the sample size would be the inclusion of private equity firms, which may allow for comparison by type of investment, size of investment, as well as stage of investment. Since data for this study were collected at a single point in time, possible changes in evaluation criteria over time were not captured. A study of the criteria using data collected over time may reveal interesting results. Such a study might portray the degree of dynamism of the venture capital in South Africa. It will also be interesting to investigate if evaluation strategies used by VCs can be used to determine the post investment performance of ventures.

### References

- Amit, R., Glosten, L. & Muller, E. 1990. 'Entrepreneurial ability, venture investments, and risk sharing', *Management Science*, **38**(10): 1232-1245.
- Barry, C. 1994. 'New directions in research on venture capital finance', *Financial Management*, **23**(3): 3-15.
- Chan, Y-K., Siegel, D. & Thacker, A.V. 1990. 'Learning, corporate control and performance requirements in venture capital contracts', *International Economic Review*, **31**(2): 365-382.
- Cohen, S. 2006. 'Exits set to increase worldwide as venture capital industry continues to globalise, says Ernst & Young', Ernst & Young 2006 Press Releases, 31 May 2006. [online] URL: [http://www.ey.com/global/content.nsf/South\\_Africa/31\\_May\\_06\\_Exits\\_set\\_to\\_increase\\_worldwide](http://www.ey.com/global/content.nsf/South_Africa/31_May_06_Exits_set_to_increase_worldwide). Accessed 27 September 2007.
- Dixon, R. 1991. 'Venture capitalists and the appraisal of investments', *OMEGA - The International Journal of Management Science*, **19**(5): 333-344.

- Fried, V. & Hisrich, R. 1994. 'Toward a model of venture capital investment decision making', *Financial Management*, **23**(3): 28–37.
- Ge, D., Mahoney, J.M. & Mahoney J.T. 2005. *New venture valuation by venture capitalists: An integrative approach*. New York: Federal Reserve Bank of New York.
- Gompers, P.A. 1995. 'Optimal investment, monitoring, and the stages of venture capital', *Journal of Finance*, **50**: 1461–1489.
- Gompers, P. & Lerner, J. 2000. *The venture capital cycle*. Cambridge: MIT Press.
- Kakati, M. 2003. 'Success criteria in high-tech new ventures', *Technovation*, **23**: 447–457.
- Kaplan, S.N. & Strömberg, P. 2003. 'Financial contracting theory meets the real world: an empirical analysis of venture capital contracts', *Review of Economic Studies*, **70**(243): 281–315.
- Larsson, J. & Roosvall, M. 2000. 'Overruling uncertainty.' International Management master's thesis No 2000:5, Graduate Business School, Goteborg University.
- Long, J. 2007. "'No risk, no reward", advises HBD venture capital CEO Julia Long at USB talk', University of Stellenbosch Business School media releases, 30 July 2007. [Online] URL: [http://www.usb.ac.za/usb/discover/MediaReleases/MediaReleases\\_30-07-2007\\_Eng.asp](http://www.usb.ac.za/usb/discover/MediaReleases/MediaReleases_30-07-2007_Eng.asp). Accessed 28 September 2007.
- MacMillan, I.C., Siegel, R. & Subba Narasimha, P.N. 1985. 'Criteria used by venture capitalists to evaluate new venture proposals', *Journal of Business Venturing*, **1**(1): 119–128.
- MacMillan, I.C., Zemann, L. & Subba Narasimha, P.N. 1987. 'Criteria distinguishing successful from unsuccessful ventures in the venture screening process', *Journal of Business Venturing*, **2**(2): 123–137.
- Mishra, A. 2004. 'Indian venture capitalists (VCs): Investment evaluation criteria', *ICFAI Journal of Applied Finance*, **10**(7): 71–93.
- Pintado, T.R., De Lema, D.G.P. & Van Auken, H. 2007. 'Venture capital in Spain by stage of development', *Journal of Small Business Management*, **45**(1): 68–88.
- Poindexter, J.B. 1976. 'The efficiency of financial markets: The venture capital case'. Unpublished doctoral thesis, New York University, New York.
- Pries, F. 2001. 'Distinguishing successful from unsuccessful venture capital investments in technology-based new ventures: How investment decision criteria relate to deal performance'. Unpublished master's thesis, University of Waterloo, Ontario.
- Quindlen, R. 2000. *Confessions of a venture capitalist: Inside the high-stakes world of new venture financing*. New York, NY: Warner Books.
- SAVCA, 2007. *Venture capital and private equity industry performance survey of South Africa covering the 2006 calendar year*. Illovo, Johannesburg: SAVCA.
- Sahlman, W.A. 1988. 'Aspects of financial contracting in venture capital', *Journal of Applied Corporate Finance*, **Summer**: 23–36.
- Sandberg, W.R. & Hofer, C.W. 1987. 'Improving new venture performance: The role of strategy, industry structure, and the entrepreneur', *Journal of Business Venturing*, **2**(1): 5–28.
- Shane, S. & Cable, D. 2002. 'Network ties, reputation, and the financing of new ventures', *Management Science*, **48**(3): 364–381.
- Shepherd, D.A. 1999. 'Venture capitalists' assessment of new venture survival', *Management Science*, **45**(5): 621–632.
- SouthAfrica.info. 2007. 'US group in \$3.5bn Edcon buyout', 18 April 2007. [Online] URL: [http://www.southafrica.info/doing\\_business/investment/edcon.htm](http://www.southafrica.info/doing_business/investment/edcon.htm). Accessed 27 September 2007.
- Timmons, J. & Spinelli, S. 2004. *New venture creation*. 6<sup>th</sup> Edition. Boston: Irwin McGraw-Hill.
- Tyebjee, T. & Bruno, A. 1984. 'A model of venture capitalist investment activity', *Management Science*, **30**: 1051–1066.
- Van Auken, H. 2001. 'Financing small technology-based companies: The relationship between familiarity with capital and ability to price and negotiate investment', *Journal of Small Business Management*, **30**(3): 240–258.
- Wells, W.A. 1974. 'Venture capital decision making'. Unpublished doctoral dissertation, Carnegie Mellon University, Pittsburg.
- Wright, M. & Robbie, K. 1998. 'Venture capital and private equity: A review and synthesis', *Journal of Business Finance and Accounting*, **25**(5): 521–570.
- Zider, B. 1998. 'How venture capital works', *Harvard Business Review*, **Nov-Dec**: 131–139.